

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/09781

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B7/005

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, COMPENDEX, INSPEC, PAJ, IBM-TDB, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 173 162 B1 (JOHANSSON MATHIAS ET AL) 9 January 2001 (2001-01-09) column 1, line 6 - line 8 column 1, line 36 - line 46 column 1, line 66 -column 2, line 3 column 2, line 32 - line 34 column 2, line 45 - line 49 column 3, line 4 - line 30 column 3, line 43 - line 47 column 3, line 60 - line 63 column 4, line 1 - line 15 column 6, line 66 -column 7, line 24 figures 3-7	1-3,12, 15,18
A	----	4-11,13, 14,17, 19,20 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## ° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

19 December 2003

Date of mailing of the international search report

08/01/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 987 833 A (NIPPON ELECTRIC CO) 22 March 2000 (2000-03-22) abstract paragraphs '0001!, '0003!, '0004!, '0007!, '0008!, '0010!- '0013!, '0017!, '0020! figures 1,4-6	1-3, 12, 15, 18
A	---	4-11, 13, 14, 17, 19, 20
A	EP 1 215 833 A (LUCENT TECHNOLOGIES INC) 19 June 2002 (2002-06-19) paragraph '0001! - paragraph '0028! figures 1,2	1-20
A	US 5 991 284 A (WILLENEGGER SERGE ET AL) 23 November 1999 (1999-11-23) column 1, line 5 -column 4, line 64 figure 2	1-20
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